START

9206L608-WES-598

0047023

**ROY F. WESTON, INC.**
**Lionville Laboratory**

**CLIENT:** WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 06-10-92
**RFW #:** 9206L608, GC/MS VOLATILE
**W.O. #:** 6168-02-01

**NARRATIVE**

The set of samples consisted of eight (8) water samples collected on 06-07-92.

The samples were analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Volatile target compounds on 06-16,17,26-92.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. Samples B06PS9 and B06PT1 were analyzed outside holding time and reported as per Karl Pool.

2. Non-target compounds were not detected in these samples.

3. All surrogate recoveries were within EPA QC limits.

4. All matrix spike recoveries were within EPA QC limits.

5. All blank spike recoveries were within EPA QC limits.

6. The laboratory blanks 92LVK109-MB1 and 92LVK110-MB1 contained the common contaminants Methylene Chloride and Acetone at levels less than 2x the CRQL.

7. All internal standard area and retention time criteria were met.

MAR 1997 RECEIVED EDMC

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

07.22.92
Date

sma/voa/06-608v.cn

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-92-00137
Record of Disposition No.

| | |
|---|---|
| DATE: 7-8-92 | LABORATORY: WESTON |
| PROJECT TITLE/NO.: 200 AAMS/92-128 | NCR NO.: |

**SAMPLE IDENTIFICATION NUMBERS:**

B06PS9
B06PT1

**DESCRIPTION OF EVENT:**

THE WESTON LABORATORY TECHNICIAN RUNNING THE VOA ANALYSIS OVERLOOKED SAMPLE NUMBERS B06PS9 AND B06PT1 AND DID NOT RUN THE VOA ANALYSIS BEFORE HOLDING TIMES HAD BEEN MISSED. THE SAMPLES WERE RUN 6 DAYS PAST THE HOLDING TIME.

**DISPOSITION OF SAMPLES:**

WITH CONCURRENCE FROM THE ERE PROJECT COORDINATOR (BRUCE FORD) THE RESULTS OF THE VOA ANALYSIS ARE TO BE REPORTED.

**APPROVAL SIGNATURES:**

JEFF LERCH/ Neal N. Pool for J.L — 7/12/92
OSM Project Coordinator (Print/Sign Name) — Date

BRUCE FORD/ [signature] — 7/21/92
Technical Representative (Print/Sign Name) — Date

Quality Assurance (Print/Sign Name) — Date

WESTON Analytics Use Only
92061608

# Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 2

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #:
AD Project Manager: Josie Kerr
QC: Del TAT: 35 day
Date Rec'd: 6-10-92 Date Due: 7-15-92
Account #: WS-Hanford

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrigerator # | | 1 | 5 | 5 | | 1 | 1 | | 4 | | 4 | — | — | 4 | | 4 |
| #/Type Container | Liquid | 3G | 2AG | 1AG | | 1AG | 1AG | | 1P | | 3P | — | — | 1P | | 1P |
| | Solid | | | | | | | | | | | | | | | |
| Volume | Liquid | 40ml | 40ml | 40ml | | 250 | 250 | | 1L | | 1L | — | — | 1L | | 1L |
| | Solid | | | | | | | | | | | | | | | |
| Preservatives | | — | — | — | | NaOH | NaOH | NaOH | HNO3 | | — | — | — | NaOH | | HNO3 |

ANALYSES REQUESTED →

| ORGANIC | | | | INORG | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOA | BNA | Pest/PCB | Herb | TOC | TOX | Radio chem | Total Metal | CN | TDS BOD TSS OIL | Anions | Dis. Ox Iron | COD Ammonia | Dis. Metals |

MATRIX CODES:
S - Soil
SE - Sediment
SO - Solid
SL - Sludge
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

| Lab ID | Client ID/Description | Matrix QC Chosen (✓) MS | MSD | Matrix | Date Collected | Time Collected | VOA | BNA | Pest/PCB | Herb | TOC | TOX | Radio chem | Total Metal | CN | TDS BOD TSS OIL | Anions | Dis. Ox Iron | COD Ammonia | Dis. Metals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | WESTON Analytics Use Only | | | | | | | | | | | | | |
| | | | | | | | 062492 | 062492 | 062492 | | TOCT | TTOX | TSUB | HSL-B-W | | TDS BOD TSS OIL | | | COD NH3-W | M HSL-S-W |
| 001 | BOG PR4 | | | W | 6-7-92 | 11:55 | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| 2 | PR 5 | | | | | | | | | | | | | | | | | | | ✓ |
| 3 | PR 6 | | | | | | ✓ | | | | | | | | | | | | | |
| 4 | BOG PS3 | | | | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| 5 | PS 4 | | | | | | | | | | | | | | | | | | | ✓ |
| 6 | PS 5 | | | | | | ✓ | | | | | | | | | | | | | |
| 7 | PS 6 | | | | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| 8 | PS 7 | | | | | | | | | | | | | | | | | | | ✓ |
| 9 | PS 8 | | | | | | ✓ | | | | | | | | | | | | | |

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions: Project: 200AMS
anion = ICCl, ICF, ICSO4, ICPO4, ICNO2, ICNO3
metals = HSL
Radio chem = Gross alpha/Beta, Gamma scan
① MS/MSD required
original Revision.

DATE/REVISIONS:
6-11-92 1. Cancel BOD & BOXD on Samples 001, 004,
2. 007, 010 per Jack King & not by chem.
6/16/92 3. TSU Added to OIL
6/16/92 4. Radiochem subbed to Teledyne
5.
6.

| Relinquished by | Received by | Date | Time | Relinquished by | Received by | Date | Time |
|---|---|---|---|---|---|---|---|
| Emery | [signature] | 6-10-92 | 11:40 | | [signature] | 6-10-92 | |
| | [signature] | | | | | | |

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or
Hand Delivered
Airbill # 250 982822
2) Ambient or Chilled
3) Received in Good Condition (Y) or (N)
4) Labels Indicate Properly Preserved (Y) or N
5) Received Within Holding Times Y or (N)

COC Tape was:
1) Present on Outer Package (Y) or N
2) Unbroken on Outer Package (Y) or N
3) Present on Sample (Y) or N
4) Unbroken on Sample (Y) or N
COC Record Present Upon Sample Rec'd (Y) or N

Discrepancies Between Samples Labels and COC Record? Y or (N)
NOTES:
BOD, BOD, Anions

RFW 21-21-001/A-7/91 ____ L372 ____ L373 ____ L375 ____ L377 ____ L378 Ref# ____ Cooler# KT-3, 5/12-7/92 381 596a
1.11.1C-19, 5/12-1/92

WESTON Analytics Use Only

92064608

# Custody Transfer Record/Lab Work Request

WESTON



Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #:
AD Project Manager:
QC: Chp Del: Chp TAT: 35 Days
Date Rec'd: 6-10-92 Date Due:
Account #: See Page 1

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrigerator # | | 1 | 5 | 5 | | 1 | 1 | | | | 4 | | | 4 | | 4 |
| #/Type Container | Liquid | 3G | 2AG | 1AG | | 1AG | 1AG | | | | 3P | | | 1P | | 1P |
| | Solid | | | | | | | | | | | | | | | |
| Volume | Liquid | 40 | 2L | 2L | | 250 | 250 | | | | 1L | | | 1L | | 1L |
| | Solid | | | | | | | | | | | | | | | |
| Preservatives | | - | - | - | | H2SO4 | H2SO4 | | | | - | | | H2SO4 | | HNO3 |
| ANALYSES REQUESTED | | ORGANIC | | | | | | | INORG | | | | | | | |
| | | VOA | BNA | Pest/PCB | Herb | TOC | TOX | Radio Chem | TR Metal | CN | TDS BOD TSS Alk | Anions | Dis. Oxygen | COD Ammonia | | Dis. Metals |

| MATRIX CODES: | Lab ID | Client ID/Description | Matrix QC Chosen (✓) MS | MSD | Matrix | Date Collected | Time Collected | VOA | BNA | Pest/PCB | Herb | TOC | TOX | Radio Chem | TR Metals | CN | TDS BOD TSS Alk | Anions | Dis. Oxygen | COD Ammonia | | Dis. Metals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | WESTON Analytics Use Only | | | | | | | | | | | | | | |
| B - Soil | 010 | B06PS9 | | | W | 6-7-92 | — | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | |
| SE - Sediment | 011 | B06PT0 | | | ↓ | ↓ | — | | | | | | | | | | | | | | | ✓ |
| SO - Solid | 012 | B06PT1 | | | ↓ | ↓ | — | ✓ | | | | | | | | | | | | | | |
| SL - Sludge | | | | | | | | | | | | | | | | | | | | | | |
| W - Water | | | | | | | | | | | | | | | | | | | | | | |
| O - Oil | | | | | | | | | | | | | | | | | | | | | | |
| A - Air | | | | | | | | | | | | | | | | | | | | | | |
| DS - Drum Solids | | | | | | | | | | | | | | | | | | | | | | |
| DL - Drum Liquids | | | | | | | | | | | | | | | | | | | | | | |
| L - EP/TCLP Leachate | | | | | | | | | | | | | | | | | | | | | | |
| WI - Wipe | | | | | | | | | | | | | | | | | | | | | | |
| X - Other | | | | | | | | | | | | | | | | | | | | | | |
| F - Fish | | | | | | | | | | | | | | | | | | | | | | |

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

WESTON Analytics Use Only

Samples were:
1) Shipped ___ or Hand Delivered ___
Airbill # ____
2) Ambient or Chilled
3) Received in Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N
COC Record Present Upon Sample Rec'd Y or N

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES: See Page 1

| Relinquished by | Received by | Date | Time | Relinquished by | Received by | Date | Time |
|---|---|---|---|---|---|---|---|
| Emery | [illegible] | 6-10-92 | 11:00 | | | | |
| | [illegible] 6-10-92 | | | | [illegible] 6-10-92 | | |

RFW 21-21-001/A-7/91 ____ L372 ____ L373 ____ L375 ____ L377 ____ L378 Ref# ____ Cooler# ____ 381-596a

000603

0000004

| Westinghouse Hanford Company | CHAIN OF CUSTODY 9206L608 |
|---|---|

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 6/7/92

Ice Chest No. SML-142

Field Logbook No. EFL-1033

Bill of Lading/Airbill No. 25C 9969625

Offsite Property No. W92-U-0324-27

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Sample Identification

B06P53

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, BOD, DISOLVED OXYGEN, ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06P54

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06P55

3, 40 ml, WATER, CLP-VOA

| [] Field Transfer of Custody | Chain of Possession | (Sign and Print Names) |
|---|---|---|
| Relinquished by: K. Trapp / K. Trapp | Received by: Lab-Incorporated | Date/Time: 6/7/92 1333 |
| Relinquished by: — | Received by: K. Trapp / K. Trapp | Date/Time: 6/9/92 0730 |
| Relinquished by: K. Trapp / K. Trapp | Received by: | Date/Time: |
| Relinquished by: Emery | Received by: [signature] | Date/Time: 6-10-92 11:00 |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

# CHAIN OF CUSTODY

9206L608

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 6/7/92

Ice Chest No. 3ML-152

Field Logbook No. EFL - 1033

Bill of Lading/Airbill No. 250986862-5

Offsite Property No. W92-0-0399-26

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

**Sample Identification**

B06P59

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, BOD, DISOLVED OXYGEN, ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06FT0

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06FT1

3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody

| Chain of Possession (Sign and Print Names) | | |
|---|---|---|
| Relinquished by: [illegible] | Received by: [illegible] to refrigerate | Date/Time: 6/7/92 1335 |
| Relinquished by: | Received by: B.WHITEN | Date/Time: 6-9-92 0:730 |
| Relinquished by: B.WHITEN | Received by: | Date/Time: |
| Relinquished by: Emery | Received by: [illegible] | Date/Time: 6-10-92 11:40 |

**Final Sample Disposition**

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

0000008

| Westinghouse Hanford Company | CHAIN OF CUSTODY | 9206L608 |
|---|---|---|

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 200AAMS

Ice Chest No. WHC-19

Bill of Lading/Airbill No. 270-796-9625

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 6/7/92

Field Logbook No. EFL - 1033

Offsite Property No. W92- [illegible]-27

Sample Identification

B06P56

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, BOD, DISOLVED OXYGEN, ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06P57

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06P59

3, 40 ml, WATER, CLP-VOA

| [] Field Transfer of Custody | Chain of Possession | (Sign and Print Names) |
|---|---|---|
| Relinquished by: [illegible] E.D. Lee | Received by: relinq to refrigerator | Date/Time: 6/7/92 1333 |
| Relinquished by: — | Received by: K. Trapp / K. Trapp | Date/Time: 6/9/92 0730 |
| Relinquished by: K. Trapp / K. Trapp | Received by: | Date/Time: |
| Relinquished by: Emery | Received by: [illegible] | Date/Time: 6-10-92 11:40 |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

0000007

| Westinghouse Hanford Company | CHAIN OF CUSTODY | 9206L608 |
|---|---|---|

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 6/7/92

Ice Chest No. KT-3

Field Logbook No. EFL-1033

Bill of Lading/Airbill No. 250986862-5

Offsite Property No. W92-0-0399-26

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Sample Identification

B06PR4

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, BOD, DISOLVED OXYGEN, ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06PR5

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06PR6

3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

| Relinquished by: | Received by: | Date/Time: |
|---|---|---|
| [illegible] | [illegible] | 6/7/92 1335 |
| Relinquished by: | Received by: | Date/Time: |
| — | B. WHITEN | 6-9-92 - 07:30 |
| Relinquished by: | Received by: | Date/Time: |
| B WHITEN | | |
| Relinquished by: | Received by: | Date/Time: |
| Emery | [illegible] | 6-10-92 1148 |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

(6) 92061608

**EMERY WORLDWIDE** — A CF Company

UNITED STATES / CANADA: Same Day, AM, Second Day, PM, Saturday Delivery

INTERNATIONAL: Express, Prearranged, Standard, Business Documents, Customs Clearance, Delivery

Bill to Consignee / Third Party Billing

Shipper's Account Number: 8502A1585

Date: 06-09-92 | Origin: PSC | Shipment Number: 250986862

| From | To | Tariff Dest. / Gate |
|---|---|---|
| STINGHOUSE SHIPPING DEPT (509) 376-6665 | JOSIE KING | |
| S DEPARTMENT OF ENERGY C/O STINGHOUSE HANFORD | RF WESTON INC | Charge Shipper $ |
| BLDG 1163 S STEVENS DRIVE | 208 WELSH POOL ROAD | Hold for Pick Up |
| HLAND WA | LIONVILLE PA | |

Customer's Reference Numbers: 1231 PB23B W9200-0399 #26 99352

Z.C.: E

Consignee's Account Number:

Zip: 19341

EMERY WORLDWI will accept Consign check with all risk being assumed by Shipper, including but not limited to non-payment, frau and misrepresenta

| Description | Pcs. | L | W | H | Total Pieces | Total Weight (in Lbs.) |
|---|---|---|---|---|---|---|
| COOLERS ID: KT-3 69#; -152 70#; SML-142 70# -19 72# R SAMPLES | 4 | | | | 4 | 281 |

FOR INFORMATION OR RATES CALL 1-800 44-EMERY (1-800-443-6379)

Declared Value $

250986862 5

NIGHT DELIVERY
ATURE SECURITY SERVICE

Zip Ship: For shipments within the 50 United States shipper has the option to check this box and, by checking, agrees that the Zip Ship conditions described in the area to the right, apply.

Mark if Emery Packaging is used: Urgent Letter 9X12; Urgent Pack 12X15

3-PHL-1

International Shipments: Free Certificate; Commodity Code

Third Party Account Number mandatory for Third Party Billing: E

Third Party Account Number

International Customs Value

International Insurance

Charge

Total Transportation Charges

Other Charges/Advance at Origin: OCIAO $

Terms and Conditions on Back

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**EMERY WORLDWIDE** — A CF Company

92061608

# SIGNATURE AND TALLY RECORD

80029-46 (8/89) Litho USA

DATE: 06-09-92 SHIPMENT NO.: 250986862 5

SHIPPER: WESTINGHOUSE SHIPPING DEPT (509) 376-6

REFERENCE NO.: W92-0-0399 #26 & #27

**SHIPPER NAME AND ADDRESS**

WESTINGHOUSE SHIPPING DEPT (509) 376-6665
G2-06 U S DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD COMPANY
2355 STEVENS DRIVE 1163 BUILDING
PO BOX 1970
RICHLAND WA 99352

**CONSIGNEE NAME AND ADDRESS**

JOSIE KING
RF WESTON INC
208 WELSH POOL ROAD
LIONVILLE PA 19341

| Pieces | Weight | Description/Marks | Emery Authorization No. |
|---|---|---|---|
| 4 | 281 LBS | WATER SAMPLES COOLER ID: KT-3 69#; SML-152 70#; SML-142 70#; WAS-19 72# | |

EACH PERSON HANDLING OR TAKING CUSTODY OF THIS SHIPMENT MUST SIGN AND COMPLETE THE INFORMATION BELOW

| | Name of Person/Company | Transship Point/Destination | Signature of Person Accepting Custody | Time/Date |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | 1036 Chu |
| 6. | Roger L White | EWWI/PHL | Roger L White | 1000/Chu |
| 7. | WS SNYDER | PHL | [illegible] | 1010 |
| 8. | Brian E. Shaffer | Lionville | Brian E. Shaffer | 11 40 6-1 |

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9206L608 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/26/92 14:02 Page: 1a

| | Cust ID: | BO6PR4 | | BO6PR4 | | BO6PR4 | | BO6PR6 | | BO6PS3 | | BO6PS5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Information | RFW#: | 001 | | 001 MS | | 001 MSD | | 003 | | 004 | | 006 | |
| | Matrix: | WATER | | WATER | | WATER | | WATER | | WATER | | WATER | |
| | D.F.: | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | |
| | Units: | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Surrogate Recovery | Toluene-d8 | 102 | % | 103 | % | 97 | % | 102 | % | 100 | % | 100 | % |
| | Bromofluorobenzene | 98 | % | 102 | % | 96 | % | 100 | % | 99 | % | 98 | % |
| | 1,2-Dichloroethane-d4 | 105 | % | 107 | % | 102 | % | 105 | % | 104 | % | 104 | % |
| | | | fl | | fl | | fl | | fl | | fl | | fl |
| Chloromethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Bromomethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Vinyl Chloride | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Chloroethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Methylene Chloride | | 13 | B | 3 | JB | 4 | JB | 15 | B | 8 | B | 8 | B |
| Acetone | | 10 | U | 10 | U | 10 | U | 10 | U | 9 | JB | 10 | U |
| Carbon Disulfide | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1-Dichloroethene | | 5 | U | 98 | % | 91 | % | 5 | U | 5 | U | 5 | U |
| 1,1-Dichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloroethene (total) | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Chloroform | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2-Butanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| 1,1,1-Trichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Carbon Tetrachloride | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Vinyl Acetate | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Bromodichloromethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloropropane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| cis-1,3-Dichloropropene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Trichloroethene | | 5 | U | 114 | % | 110 | % | 5 | U | 5 | U | 5 | U |
| Dibromochloromethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1,2-Trichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Benzene | | 5 | U | 110 | % | 106 | % | 5 | U | 5 | U | 5 | U |
| Trans-1,3-Dichloropropene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Bromoform | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 4-Methyl-2-pentanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| 2-Hexanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Tetrachloroethene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1,2,2-Tetrachloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |

*= Outside of EPA CLP QC limits.

000010

| Cust ID: | BO6PR4 | BO6PR4 | BO6PR4 | BO6PR6 | BO6PS3 | BO6PS5 |
|---|---|---|---|---|---|---|
| RFW#: | 001 | 001 MS | 001 MSD | 003 | 004 | 006 |
| Toluene | 5 U | 111 % | 105 % | 5 U | 5 U | 5 U |
| Chlorobenzene | 5 U | 114 % | 108 % | 5 U | 5 U | 5 U |
| Ethylbenzene | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Styrene | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Xylene (total) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |

*= Outside of EPA CLP QC limits.

110009

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9206L608 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 06/26/92 14:02 | Page: 2a

| | Cust ID: | BO6PS6 | | BO6PS8 | | BO6PS9 | | BO6PT1 | | VBLK | | VBLK BS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Information | RFW#: | 007 | | 009 | | 010 | | 012 | | 92LVK109-MB1 | | 92LVK109-MB1 | |
| | Matrix: | WATER | | WATER | | WATER | | WATER | | WATER | | WATER | |
| | D.F.: | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | |
| | Units: | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Surrogate Recovery | Toluene-d8 | 103 | % | 102 | % | 97 | % | 97 | % | 101 | % | 101 | % |
| | Bromofluorobenzene | 102 | % | 100 | % | 89 | % | 92 | % | 99 | % | 101 | % |
| | 1,2-Dichloroethane-d4 | 109 | % | 110 | % | 90 | % | 101 | % | 94 | % | 97 | % |
| | | | fl | | fl | | fl | | fl | | fl | | fl |
| Chloromethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Bromomethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Vinyl Chloride | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Chloroethane | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Methylene Chloride | | 8 | B | 12 | B | 5 | U | 3 | J | 3 | J | 4 | JB |
| Acetone | | 10 | U | 10 | U | 10 | U | 10 | U | 3 | J | 8 | JB |
| Carbon Disulfide | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1-Dichloroethene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 106 | % |
| 1,1-Dichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloroethene (total) | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Chloroform | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2-Butanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| 1,1,1-Trichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Carbon Tetrachloride | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Vinyl Acetate | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Bromodichloromethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichloropropane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| cis-1,3-Dichloropropene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Trichloroethene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 117 | % |
| Dibromochloromethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1,2-Trichloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Benzene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 105 | % |
| Trans-1,3-Dichloropropene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Bromoform | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 4-Methyl-2-pentanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| 2-Hexanone | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| Tetrachloroethene | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,1,2,2-Tetrachloroethane | | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |

*= Outside of EPA CLP QC limits.

000012

| Cust ID: | BO6PS6 | | BO6PS8 | | BO6PS9 | | BO6PT1 | | VBLK | | VBLK BS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RFW#: | 007 | | 009 | | 010 | | 012 | | 92LVK109-MB1 | | 92LVK109-MB1 | |
| Toluene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 110 | % |
| Chlorobenzene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 112 | % |
| Ethylbenzene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Styrene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Xylene (total) | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |

*= Outside of EPA CLP QC limits.

0 0 0 0 1 9

1A

0000037

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6G19

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/16/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 13 | B |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E 0000038

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6G19

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/16/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A

0000043

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO6PR6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6G20

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/16/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 15 | B |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E 000044

# VOLATILE ORGANICS ANALYSIS SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PR6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6G20

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/16/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

0000049

1A
VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-004

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H16

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 8 | B |
| 67-64-1 | Acetone | 9 | JB |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E 0000050

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BO6PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-004

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H16

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A

0000055

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO6PS5

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-006

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H17

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 8 | B |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E

0000057

CLIENT SAMPLE NO.

BO6PS5

# VOLATILE ORGANICS ANALYSIS SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-006

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H17

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A

VOLATILE ORGANICS ANALYSIS SHEET

000062

CLIENT SAMPLE NO.

B06PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-007

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H18

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 8 | B |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E

0000063 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-007

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H18

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A

VOLATILE ORGANICS ANALYSIS SHEET

0000068

CLIENT SAMPLE NO.

BO6PS8

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-009

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H19

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 12 | B |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E 0000069

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PS8

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-009

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: AK6H19

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/17/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A
VOLATILE ORGANICS ANALYSIS SHEET

0000074

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-010

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: B062522

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/26/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 5 | U |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E 0000075

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-010

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: B062522

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/26/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

1A 0100079

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PT1

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-012

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: B062525

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/26/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 3 | J |
| 67-64-1 | Acetone | 10 | U |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | Trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

1E

0000080

CLIENT SAMPLE NO.

BO6PT1

# VOLATILE ORGANICS ANALYSIS SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-012

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: B062525

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____

Date Analyzed: 06/26/92

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | | | | |

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, HSL List

RFW Batch Number: 9206L608 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 07/13/92 18:05 | Page: 1a

| | Cust ID: | BO6PR4 | BO6PR4 | BO6PR4 | BO6PS3 | BO6PS6 | BO6PS9 |
|---|---|---|---|---|---|---|---|
| Sample Information | RFW#: | 001 | 001 MS | 001 MSD | 004 | 007 | 010 |
| | Matrix: | WATER | WATER | WATER | WATER | WATER | WATER |
| | D.F.: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | Units: | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| Surrogate Recovery | Nitrobenzene-d5 | 34 * % | 45 % | 27 * % | 42 % | 42 % | 48 % |
| | 2-Fluorobiphenyl | 50 % | 59 % | 45 % | 56 % | 56 % | 59 % |
| | p-Terphenyl-d14 | 87 % | 114 % | 109 % | 107 % | 92 % | 96 % |
| | Phenol-d5 | 21 % | 33 % | 24 % | 27 % | 34 % | 36 % |
| | 2-Fluorophenol | 26 % | 39 % | 27 % | 38 % | 50 % | 52 % |
| | 2,4,6-Tribromophenol | 30 % | 32 % | 28 % | 65 % | 72 % | 63 % |
| | | fl | fl | fl | fl | fl | fl |
| Phenol | | 10 U | 35 % | 26 % | 10 U | 10 U | 10 U |
| bis(2-Chloroethyl)ether | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Chlorophenol | | 10 U | 56 % | 42 % | 10 U | 10 U | 10 U |
| 1,3-Dichlorobenzene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,4-Dichlorobenzene | | 10 U | 47 % | 29 * % | 10 U | 10 U | 10 U |
| Benzyl alcohol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Methylphenol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Chloroisopropyl)ether | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Methylphenol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| N-Nitroso-Di-n-propylamine | | 10 U | 47 % | 30 * % | 10 U | 10 U | 10 U |
| Hexachloroethane | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Nitrobenzene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Isophorone | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitrophenol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dimethylphenol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzoic acid | | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| bis(2-Chloroethoxy)methane | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dichlorophenol | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 1,2,4-Trichlorobenzene | | 10 U | 46 % | 27 * % | 10 U | 10 U | 10 U |
| Naphthalene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloroaniline | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobutadiene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | | 10 U | 83 % | 76 % | 10 U | 10 U | 10 U |
| 2-Methylnaphthalene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorocyclopentadiene | | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |

*= Outside of EPA CLP QC limits.

| Cust ID: | BO6PR4 | BO6PR4 | BO6PR4 | BO6PS3 | BO6PS6 | BO6PS9 |
|---|---|---|---|---|---|---|
| RFW#: | 001 | 001 MS | 001 MSD | 004 | 007 | 010 |
| 2,4,6-Trichlorophenol | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4,5-Trichlorophenol | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| 2-Chloronaphthalene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Nitroaniline | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| Dimethylphthalate | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Acenaphthylene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 3-Nitroaniline | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| Acenaphthene | 10 U | 70 % | 61 % | 10 U | 10 U | 10 U |
| 2,4-Dinitrophenol | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| 4-Nitrophenol | 50 U | 13 % | 8 * % | 50 U | 50 U | 50 U |
| Dibenzofuran | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrotoluene | 10 U | 95 % | 95 % | 10 U | 10 U | 10 U |
| Diethylphthalate | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Chlorophenyl-phenylether | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Fluorene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Nitroaniline | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| 4,6-Dinitro-2-methylphenol | 50 U | 50 U | 50 U | 50 U | 50 U | 50 U |
| N-Nitrosodiphenylamine (1) | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 4-Bromophenyl-phenylether | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Hexachlorobenzene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Pentachlorophenol | 50 U | 6 * % | 15 % | 50 U | 50 U | 50 U |
| Phenanthrene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Anthracene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Di-n-Butylphthalate | 3 JB | 3 JB | 2 JB | 3 JB | 2 JB | 10 U |
| Fluoranthene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Pyrene | 10 U | 162 * % | 124 % | 10 U | 10 U | 10 U |
| Butylbenzylphthalate | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| Benzo(a)anthracene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Chrysene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| bis(2-Ethylhexyl)phthalate | 17 | 21 | 12 | 18 | 17 | 10 U |
| Di-n-Octyl phthalate | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(b)fluoranthene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(k)fluoranthene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(a)pyrene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Indeno(1,2,3-cd)pyrene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Dibenzo(a,h)anthracene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Benzo(g,h,i)perylene | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

**ROY F. WESTON, INC.**
**Lionville Laboratory**

**CLIENT:** WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 06-10-92
**RFW #:** 9206L608, SEMIVOLATILE
**W.O. #:** 6168-02-01

**NARRATIVE**

The set of samples consisted of four (4) water samples collected on 06-07-92.

The samples were extracted on 06-12-92 and analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Semivolatile target compounds on 06-26,27,29-92.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. Non-target compounds were detected in these samples.

2. Two (2) of forty-eight (48) surrogate recoveries were outside EPA QC limits; however, EPA CLP surrogate recovery criteria were met (i.e., no more than one outlier per fraction {acid and base neutral} and no recoveries less than 10%).

3. Six (6) of twenty-two (22) matrix spike recoveries were outside EPA QC limits.

4. Three (3) of eleven (11) blank spike recoveries were outside EPA QC limits.

5. The laboratory blank 92LE0846-MB1 contained the common contaminant Di-n-butylphthalate at a level less than the CRQL.

6. All internal standard area and retention time criteria were met.

Jack R. Tuschall, Ph.D. 07.22.92
Date
Laboratory Manager
Lionville Analytical Laboratory

wma/bna/06-606b.cn

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-001

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062615

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 100-51-6 | Benzyl alcohol | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 65-85-0 | Benzoic acid | 50 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 50 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M062615

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 50 | U |
| 100-02-7 | 4-Nitrophenol | 50 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 50 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 50 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 3 | JB |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U |
| 56-55-3 | Benzo(a)anthracene | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 17 | |
| 117-84-0 | Di-n-Octyl phthalate | 10 | U |
| 205-99-2 | Benzo(b)fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F 0000030

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M062615

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 5.40 | 4 | BJ |
| 2. | UNKNOWN | 5.88 | 20 | BJ |
| 3. | UNKNOWN | 20.05 | 10 | BJ |
| 4. | ADIPATE | 22.07 | 6 | J |
| 5. | UNKNOWN | 24.92 | 30 | J |

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062616

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/27/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 100-51-6 | Benzyl alcohol | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 65-85-0 | Benzoic acid | 50 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 50 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO6PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062616

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/27/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 50 | U |
| 100-02-7 | 4-Nitrophenol | 50 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 50 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 50 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 3 | JB |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U |
| 56-55-3 | Benzo(a)anthracene | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 18 | |
| 117-84-0 | Di-n-Octyl phthalate | 10 | U |
| 205-99-2 | Benzo(b)fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062616

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/27/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 5.40 | 4 | BJ |
| 2. | UNKNOWN | 5.88 | 10 | BJ |
| 3. | UNKNOWN | 20.03 | 20 | BJ |
| 4. | ADIPATE | 22.07 | 7 | J |
| 5. | UNKNOWN | 24.93 | 20 | J |

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO6PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-007

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062912

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 100-51-6 | Benzyl alcohol | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 65-85-0 | Benzoic acid | 50 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 50 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: M062912

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 50 | U |
| 100-02-7 | 4-Nitrophenol | 50 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 50 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 50 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 2 | JB |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U |
| 56-55-3 | Benzo(a)anthracene | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 17 | |
| 117-84-0 | Di-n-Octyl phthalate | 10 | U |
| 205-99-2 | Benzo(b)fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-007

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062912

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

Number TICs found: 3

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 5.88 | 10 | BJ |
| 2. | UNKNOWN | 20.03 | 8 | BJ |
| 3. | UNKNOWN | 22.08 | 7 | J |

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0 0 0 0 8 6

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-010

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062913

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 100-51-6 | Benzyl alcohol | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 65-85-0 | Benzoic acid | 50 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 50 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000087

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-010

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062913

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 50 | U |
| 100-02-7 | 4-Nitrophenol | 50 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 50 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 50 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U |
| 56-55-3 | Benzo(a)anthracene | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10 | U |
| 117-84-0 | Di-n-Octyl phthalate | 10 | U |
| 205-99-2 | Benzo(b)fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10 | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F 0000088

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9206L608-010

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M062913

Level: (low/med) LOW

Date Received: 06/10/92

% Moisture: not dec. _____ dec.

Date Extracted: 06/12/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 06/29/92

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.00

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN | 5.87 | 30 | BJ |
| 2. | UNKNOWN | 20.02 | 10 | BJ |

Roy F. Weston, Inc. - Lionville Laboratory
Pesticide/PCBs by GC, CLP List

RFW Batch Number: 9206L608 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/26/92 13:54 Page: 1

| | Cust ID: | BO6PR4 | | BO6PS3 | | BO6PS3 | | BO6PS3 | | BO6PS6 | | BO6PS9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Information | RFW#: | 001 | | 004 | | 004 MS | | 004 MSD | | 007 | | 010 | |
| | Matrix: | WATER | | WATER | | WATER | | WATER | | WATER | | WATER | |
| | D.F.: | 1.00 | | 1.00 | | 2.00 | | 2.00 | | 1.00 | | 1.00 | |
| | Units: | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | | ug/L | |
| Surrogate: Di-n-butylchlorendate | | 90 | % | 105 | % | 106 | % | 122 | % | 114 | % | I | % |
| | | | fl | | fl | | fl | | fl | | fl | | fl |
| Alpha-BHC | | 0.050 | U | 0.050 | U | 0.20 | U | 0.20 | U | 0.050 | U | 0.050 | U |
| Beta-BHC | | 0.050 | U | 0.050 | U | 0.20 | U | 0.20 | U | 0.050 | U | 0.050 | U |
| Delta-BHC | | 0.050 | U | 0.050 | U | 0.20 | U | 0.20 | U | 0.050 | U | 0.050 | U |
| gamma-BHC (Lindane) | | 0.050 | U | 0.050 | U | 65 | % | 70 | % | 0.050 | U | 0.050 | U |
| Heptachlor | | 0.050 | U | 0.050 | U | 75 | % | 80 | % | 0.050 | U | 0.050 | U |
| Aldrin | | 0.050 | U | 0.050 | U | 65 | % | 70 | % | 0.050 | U | 0.050 | U |
| Heptachlor epoxide | | 0.050 | U | 0.050 | U | 0.20 | U | 0.20 | U | 0.050 | U | 0.050 | U |
| Endosulfan I | | 0.050 | U | 0.050 | U | 0.20 | U | 0.20 | U | 0.050 | U | 0.050 | U |
| Dieldrin | | 0.10 | U | 0.10 | U | 78 | % | 84 | % | 0.10 | U | 0.10 | U |
| 4,4'-DDE | | 0.10 | U | 0.10 | U | 0.40 | U | 0.40 | U | 0.10 | U | 0.10 | U |
| Endrin | | 0.10 | U | 0.10 | U | 84 | % | 94 | % | 0.10 | U | 0.10 | U |
| Endosulfan II | | 0.10 | U | 0.10 | U | 0.40 | U | 0.40 | U | 0.10 | U | 0.10 | U |
| 4,4'-DDD | | 0.10 | U | 0.10 | U | 0.40 | U | 0.40 | U | 0.10 | U | 0.10 | U |
| Endosulfan sulfate | | 0.10 | U | 0.10 | U | 0.40 | U | 0.40 | U | 0.10 | U | 0.10 | U |
| 4,4'-DDT | | 0.10 | U | 0.10 | U | 72 | % | 78 | % | 0.10 | U | 0.10 | U |
| Methoxychlor | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Endrin ketone | | 0.10 | U | 0.10 | U | 0.40 | U | 0.40 | U | 0.10 | U | 0.10 | U |
| alpha-Chlordane | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| gamma-Chlordane | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Toxaphene | | 1.0 | U | 1.0 | U | 4.0 | U | 4.0 | U | 1.0 | U | 1.0 | U |
| Aroclor-1016 | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Aroclor-1221 | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Aroclor-1232 | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Aroclor-1242 | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Aroclor-1248 | | 0.50 | U | 0.50 | U | 2.0 | U | 2.0 | U | 0.50 | U | 0.50 | U |
| Aroclor-1254 | | 1.0 | U | 1.0 | U | 4.0 | U | 4.0 | U | 1.0 | U | 1.0 | U |
| Aroclor-1260 | | 1.0 | U | 1.0 | U | 4.0 | U | 4.0 | U | 1.0 | U | 1.0 | U |

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

0 0 0 0 1 0

**ROY F. WESTON, INC.**
**Lionville Laboratory**

**CLIENT:** WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 06-10-92
**RFW #:** 9206L608, PEST/PCB
**W.O. #:** 6168-02-01

**NARRATIVE**

The set of samples consisted of four (4) water samples collected on 06-07-92.

The samples were extracted on 06-15-92 and analyzed according to criteria set forth in the Contract Laboratory Program for Pesticide and PCB target compounds on 06-26-92.

A modification to the Contract Laboratory Program 02/88 was initiated to include surrogate requirements from Method SW 846. Tetrachloro-m-xylene (TCX) is an early eluting compound which is an additional surrogate added to sample extracts and will be reported when there is an interference with di-n-butylchlorendate (DBC).

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. Linearity and breakdown criteria were met on the primary column.

2. Continuing calibration criteria were exceeded for several compounds; however, this occurred in standards analyzed after the sample extracts, so there was no re-analysis requirements.

3. Retention time criteria were met for all compounds on both the primary and confirmation columns.

4. All obtainable surrogate recoveries were within EPA QC limits. Due to an interference with the DBC surrogate recovery in sample B06PS9, the TCX surrogate recovery was calculated to be 52.0%, indicating no problem with extraction procedure.

5. All matrix spike recoveries were within EPA QC limits.

6. All blank spike recoveries were within EPA QC limits.

WESTON

7. The blank spike and matrix spike samples required two-fold dilutions to maintain the pesticide concentrations within the linear range of the instrument.

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

06.30.92
Date

sma/pcb/06-608pp.cn

1D 0000020

# PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO6PR4

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 06259203.13

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/15/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 319-84-6 | Alpha-BHC | 0.050 | U |
| 319-85-7 | Beta-BHC | 0.050 | U |
| 319-86-8 | Delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.50 | U |
| 5103-74-2 | gamma-Chlordane | 0.50 | U |
| 8001-35-2 | Toxaphene | 1.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.50 | U |
| 11104-28-2 | Aroclor-1221 | 0.50 | U |
| 11141-16-5 | Aroclor-1232 | 0.50 | U |
| 53469-21-9 | Aroclor-1242 | 0.50 | U |
| 12672-29-6 | Aroclor-1248 | 0.50 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

JB 6/29/92

1D 0000025

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS3

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 06259203.14

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/15/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 319-84-6 | Alpha-BHC | 0.050 | U |
| 319-85-7 | Beta-BHC | 0.050 | U |
| 319-86-8 | Delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.50 | U |
| 5103-74-2 | gamma-Chlordane | 0.50 | U |
| 8001-35-2 | Toxaphene | 1.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.50 | U |
| 11104-28-2 | Aroclor-1221 | 0.50 | U |
| 11141-16-5 | Aroclor-1232 | 0.50 | U |
| 53469-21-9 | Aroclor-1242 | 0.50 | U |
| 12672-29-6 | Aroclor-1248 | 0.50 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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FORM 1 PEST 12/88 Rev.

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PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS6

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-007

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 06259203.21

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/15/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | |
|---|---|---|---|
| 319-84-6 | Alpha-BHC | 0.050 | U |
| 319-85-7 | Beta-BHC | 0.050 | U |
| 319-86-8 | Delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.50 | U |
| 5103-74-2 | gamma-Chlordane | 0.50 | U |
| 8001-35-2 | Toxaphene | 1.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.50 | U |
| 11104-28-2 | Aroclor-1221 | 0.50 | U |
| 11141-16-5 | Aroclor-1232 | 0.50 | U |
| 53469-21-9 | Aroclor-1242 | 0.50 | U |
| 12672-29-6 | Aroclor-1248 | 0.50 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B06PS9

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9206L608-010

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 06259203.22

Level: (low/med) LOW Date Received: 06/10/92

% Moisture: not dec. _____ dec. Date Extracted: 06/15/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 06/26/92

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| CAS NO. | COMPOUND | | |
|---|---|---|---|
| 319-84-6 | Alpha-BHC | 0.050 | U |
| 319-85-7 | Beta-BHC | 0.050 | U |
| 319-86-8 | Delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.50 | U |
| 5103-74-2 | gamma-Chlordane | 0.50 | U |
| 8001-35-2 | Toxaphene | 1.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.50 | U |
| 11104-28-2 | Aroclor-1221 | 0.50 | U |
| 11141-16-5 | Aroclor-1232 | 0.50 | U |
| 53469-21-9 | Aroclor-1242 | 0.50 | U |
| 12672-29-6 | Aroclor-1248 | 0.50 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DEB 6/29/92

FORM 1 PEST 12/88 Rev.

**ROY F. WESTON, INC.**
**Lionville Laboratory**

**CLIENT:** WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 06-10-92
**RFW #:** 9206L608
**W.O. #:** 6168-02-01

## INORGANIC NARRATIVE

The following is a summary of the quality control results and a description of any problems encountered during the analysis of this batch of samples:

1. Sample holding times as required by 40CFR136 were met with the exception of Nitrate by IC, Nitrite by IC and Phosphate by IC, which were received past hold and Total Dissolved Solids which was analyzed past hold.

2. Preparation blank results were below the required detection limit with the exception of Total Organic Halides.

3. All laboratory control standards (blank spikes) were within the control limits of 80-120%. All %RPD were within the 20% guidance limit.

4. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.

5. Matrix spike recoveries are summarized on the Inorganic Accuracy Report contained within this document. All recoveries were within the 75-125% guidance limits. All %RPD were within the 20% guidance limit.

6. Replicate results are summarized on the Inorganic Precision Report contained within this document. All results were within the 20% RPD guidance limit.

7. The analytical methods applied by the laboratory, unless otherwise requested, for all inorganic analyses are derived from the USEPA Method for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020) and Standard Methods for the Examination of Water and Wastewater 16 ed. Methods for the analysis of solid samples are derived from Test Methods for Evaluating Solid Waste (USEPA SW846).

Margaret M. Beaty for 7/20/92
Jack R. Tuschall, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

JUL 1992
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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/06/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|
| -001 | BO6PR4 | Alkalinity | 64.0 | MG/L | 2.0 |
| | | Chloride by IC | 45.5 | MG/L | 5.0 |
| | | Fluoride by IC | 0.50 u | MG/L | 0.50 |
| | | Nitrite by IC | 0.25 u | MG/L | 0.25 |
| | | Nitrate by IC | 51.8 | MG/L | 5.0 |
| | | Chemical Oxygen Demand | 19.4 | MG/L | 5.0 |
| | | Phosphate by IC | 0.25 u | MG/L | 0.25 |
| | | Sulfate by IC | 105 | MG/L | 5.0 |
| | | Ammonia, as N | 0.10 u | MG/L | 0.10 |
| | | Total Organic Carbon | 2.4 | MG/L | 0.50 |
| | | Total Dissolved Solids | 456 | MG/L | 5.0 |
| | | Total Organic Halides | 86.9 | UG/L | 20.0 |
| | | Total Suspended Solids | 5.0 u | MG/L | 5.0 |
| -004 | BO6PS3 | Alkalinity | 110 | MG/L | 2.0 |
| | | Chloride by IC | 5.2 | MG/L | 0.25 |
| | | Fluoride by IC | 1.4 | MG/L | 0.50 |
| | | Nitrite by IC | 0.25 u | MG/L | 0.25 |
| | | Nitrate by IC | 0.25 u | MG/L | 0.25 |
| | | Chemical Oxygen Demand | 13.6 | MG/L | 5.0 |
| | | Phosphate by IC | 0.25 u | MG/L | 0.25 |
| | | Sulfate by IC | 12.5 | MG/L | 2.5 |
| | | Ammonia, as N | 0.10 u | MG/L | 0.10 |
| | | Total Organic Carbon | 1.0 | MG/L | 0.50 |
| | | Total Dissolved Solids | 191 | MG/L | 5.0 |
| | | Total Organic Halides | 12.9 | UG/L | 10.0 |
| | | Total Suspended Solids | 5.0 u | MG/L | 5.0 |

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/06/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|
| -007 | BO6PS6 | Alkalinity | 115 | MG/L | 2.0 |
| | | Chloride by IC | 6.0 | MG/L | 0.25 |
| | | Fluoride by IC | 0.82 | MG/L | 0.50 |
| | | Nitrite by IC | 0.25 u | MG/L | 0.25 |
| | | Nitrate by IC | 10.3 | MG/L | 2.5 |
| | | Chemical Oxygen Demand | 12.2 | MG/L | 5.0 |
| | | Phosphate by IC | 0.25 u | MG/L | 0.25 |
| | | Sulfate by IC | 24.8 | MG/L | 2.5 |
| | | Ammonia, as N | 0.10 u | MG/L | 0.10 |
| | | Total Organic Carbon | 0.84 | MG/L | 0.50 |
| | | Total Dissolved Solids | 216 | MG/L | 5.0 |
| | | Total Organic Halides | 80.6 | UG/L | 10.0 |
| | | Total Suspended Solids | 5.0 u | MG/L | 5.0 |
| -010 | BO6PS9 | Alkalinity | 120 | MG/L | 2.0 |
| | | Chloride by IC | 5.3 | MG/L | 0.25 |
| | | Fluoride by IC | 1.4 | MG/L | 0.50 |
| | | Nitrite by IC | 0.25 u | MG/L | 0.25 |
| | | Nitrate by IC | 0.25 u | MG/L | 0.25 |
| | | Chemical Oxygen Demand | 9.3 | MG/L | 5.0 |
| | | Phosphate by IC | 0.25 u | MG/L | 0.25 |
| | | Sulfate by IC | 12.4 | MG/L | 2.5 |
| | | Ammonia, as N | 0.10 u | MG/L | 0.10 |
| | | Total Organic Carbon | 0.84 | MG/L | 0.50 |
| | | Total Dissolved Solids | 181 | MG/L | 5.0 |
| | | Total Organic Halides | 65.5 | UG/L | 10.0 |
| | | Total Suspended Solids | 5.0 u | MG/L | 5.0 |

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**Roy F. Weston, INC.**
**Lionville Laboratory**

**CLIENT:** WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 06-10-92
**RFW #:** 9206L608
**W.O. #:** 6168-02-01

## METALS NARRATIVE

The set of samples consisted of eight (8) water samples collected on 06-07-92.

The samples were analyzed according to criteria set forth in CLP SOW 3/90.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. ICVs, CCVs, and LCSs stock standards were purchased from Inorganic Ventures Laboratory.

2. All ICV and CCV values were within control limits.

3. All ICB and CCB values were within control limits.

4. All preparation blank values were within control limits.

5. All LCS results were within the 80-120% control limits.

6. All matrix spike recoveries were within the 75-125% control limits.

7. All duplicate analyses were within the 20% RPD control limit.

8. The code CV is currently in use by the laboratory for both mercury instruments in operation (HG1 and HG2). HG1 is complete with autosampler and software, but still requires manual digestion; HG2 is operated by the analyst, produces a strip chart and also requires manual digestion.

9. HG1 requires less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionally scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 ml. For soils, 0.1 gram of sample is taken to a final volume of 50 ml (including all reagents).

WESTON
MANAGERS DESIGNERS CONSULTANTS

10. The graphite furnace time that appears on Form XIV is the time of the first injection. The time that appears on the data is the print time.

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratories

07.09.92
Date

rls\clp-met.nar

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -001 | BO6PR4 | Silver, Total | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Total | 200 | u | UG/L | 200 |
| | | Arsenic, Total | 10.0 | u | UG/L | 10.0 |
| | | Barium, Total | 200 | u | UG/L | 200 |
| | | Beryllium, Total | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Total | 81900 | | UG/L | 5000 |
| | | Cadmium, Total | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Total | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Total | 10.0 | u | UG/L | 10.0 |
| | | Copper, Total | 25.0 | u | UG/L | 25.0 |
| | | Iron, Total | 100 | u | UG/L | 100 |
| | | Mercury, Total | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Total | 5000 | u | UG/L | 5000 |
| | | Magnesium, Total | 19200 | | UG/L | 5000 |
| | | Manganese, Total | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Total | 8010 | | UG/L | 5000 |
| | | Nickel, Total | 40.0 | u | UG/L | 40.0 |
| | | Lead, Total | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Total | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Total | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Total | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Total | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Total | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -002 | BO6PR5 | Silver, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Soluble | 200 | u | UG/L | 200 |
| | | Arsenic, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Barium, Soluble | 200 | u | UG/L | 200 |
| | | Beryllium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Soluble | 83000 | | UG/L | 5000 |
| | | Cadmium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Copper, Soluble | 25.0 | u | UG/L | 25.0 |
| | | Iron, Soluble | 100 | u | UG/L | 100 |
| | | Mercury, Soluble | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Soluble | 5240 | | UG/L | 5000 |
| | | Magnesium, Soluble | 19500 | | UG/L | 5000 |
| | | Manganese, Soluble | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Soluble | 8120 | | UG/L | 5000 |
| | | Nickel, Soluble | 40.0 | u | UG/L | 40.0 |
| | | Lead, Soluble | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Soluble | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Soluble | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -004 | BO6PS3 | Silver, Total | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Total | 200 | u | UG/L | 200 |
| | | Arsenic, Total | 10.0 | u | UG/L | 10.0 |
| | | Barium, Total | 200 | u | UG/L | 200 |
| | | Beryllium, Total | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Total | 8080 | | UG/L | 5000 |
| | | Cadmium, Total | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Total | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Total | 10.0 | u | UG/L | 10.0 |
| | | Copper, Total | 25.0 | u | UG/L | 25.0 |
| | | Iron, Total | 100 | u | UG/L | 100 |
| | | Mercury, Total | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Total | 8580 | | UG/L | 5000 |
| | | Magnesium, Total | 5000 | u | UG/L | 5000 |
| | | Manganese, Total | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Total | 43500 | | UG/L | 5000 |
| | | Nickel, Total | 40.0 | u | UG/L | 40.0 |
| | | Lead, Total | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Total | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Total | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Total | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Total | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Total | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -005 | BO6PS4 | Silver, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Soluble | 200 | u | UG/L | 200 |
| | | Arsenic, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Barium, Soluble | 200 | u | UG/L | 200 |
| | | Beryllium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Soluble | 8120 | | UG/L | 5000 |
| | | Cadmium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Copper, Soluble | 25.0 | u | UG/L | 25.0 |
| | | Iron, Soluble | 100 | u | UG/L | 100 |
| | | Mercury, Soluble | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Soluble | 8790 | | UG/L | 5000 |
| | | Magnesium, Soluble | 5000 | u | UG/L | 5000 |
| | | Manganese, Soluble | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Soluble | 43800 | | UG/L | 5000 |
| | | Nickel, Soluble | 40.0 | u | UG/L | 40.0 |
| | | Lead, Soluble | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Soluble | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Soluble | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -007 | B06PS6 | Silver, Total | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Total | 200 | u | UG/L | 200 |
| | | Arsenic, Total | 10.0 | u | UG/L | 10.0 |
| | | Barium, Total | 200 | u | UG/L | 200 |
| | | Beryllium, Total | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Total | 21600 | | UG/L | 5000 |
| | | Cadmium, Total | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Total | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Total | 10.0 | u | UG/L | 10.0 |
| | | Copper, Total | 25.0 | u | UG/L | 25.0 |
| | | Iron, Total | 100 | u | UG/L | 100 |
| | | Mercury, Total | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Total | 5000 | u | UG/L | 5000 |
| | | Magnesium, Total | 6990 | | UG/L | 5000 |
| | | Manganese, Total | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Total | 27400 | | UG/L | 5000 |
| | | Nickel, Total | 40.0 | u | UG/L | 40.0 |
| | | Lead, Total | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Total | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Total | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Total | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Total | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Total | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -008 | BO6PS7 | Silver, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Soluble | 200 | u | UG/L | 200 |
| | | Arsenic, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Barium, Soluble | 200 | u | UG/L | 200 |
| | | Beryllium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Soluble | 22100 | | UG/L | 5000 |
| | | Cadmium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Copper, Soluble | 25.0 | u | UG/L | 25.0 |
| | | Iron, Soluble | 100 | u | UG/L | 100 |
| | | Mercury, Soluble | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Soluble | 5080 | | UG/L | 5000 |
| | | Magnesium, Soluble | 7160 | | UG/L | 5000 |
| | | Manganese, Soluble | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Soluble | 28000 | | UG/L | 5000 |
| | | Nickel, Soluble | 40.0 | u | UG/L | 40.0 |
| | | Lead, Soluble | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Soluble | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Soluble | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -010 | BO6PS9 | Silver, Total | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Total | 200 | u | UG/L | 200 |
| | | Arsenic, Total | 10.0 | u | UG/L | 10.0 |
| | | Barium, Total | 200 | u | UG/L | 200 |
| | | Beryllium, Total | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Total | 8150 | | UG/L | 5000 |
| | | Cadmium, Total | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Total | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Total | 10.0 | u | UG/L | 10.0 |
| | | Copper, Total | 25.0 | u | UG/L | 25.0 |
| | | Iron, Total | 100 | u | UG/L | 100 |
| | | Mercury, Total | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Total | 8340 | | UG/L | 5000 |
| | | Magnesium, Total | 5000 | u | UG/L | 5000 |
| | | Manganese, Total | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Total | 43800 | | UG/L | 5000 |
| | | Nickel, Total | 40.0 | u | UG/L | 40.0 |
| | | Lead, Total | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Total | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Total | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Total | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Total | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Total | 20.0 | u | UG/L | 20.0 |

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 07/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9206L608

| SAMPLE | SITE ID | ANALYTE | RESULT | | UNITS | REPORTING LIMIT |
|---|---|---|---|---|---|---|
| -011 | BO6PT0 | Silver, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Aluminum, Soluble | 200 | u | UG/L | 200 |
| | | Arsenic, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Barium, Soluble | 200 | u | UG/L | 200 |
| | | Beryllium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Calcium, Soluble | 8100 | | UG/L | 5000 |
| | | Cadmium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Cobalt, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Chromium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Copper, Soluble | 25.0 | u | UG/L | 25.0 |
| | | Iron, Soluble | 100 | u | UG/L | 100 |
| | | Mercury, Soluble | 0.20 | u | UG/L | 0.20 |
| | | Potassium, Soluble | 7670 | | UG/L | 5000 |
| | | Magnesium, Soluble | 5000 | u | UG/L | 5000 |
| | | Manganese, Soluble | 15.0 | u | UG/L | 15.0 |
| | | Sodium, Soluble | 43400 | | UG/L | 5000 |
| | | Nickel, Soluble | 40.0 | u | UG/L | 40.0 |
| | | Lead, Soluble | 3.0 | u | UG/L | 3.0 |
| | | Antimony, Soluble | 60.0 | u | UG/L | 60.0 |
| | | Selenium, Soluble | 5.0 | u | UG/L | 5.0 |
| | | Thallium, Soluble | 10.0 | u | UG/L | 10.0 |
| | | Vanadium, Soluble | 50.0 | u | UG/L | 50.0 |
| | | Zinc, Soluble | 20.0 | u | UG/L | 20.0 |

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PR4

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660801

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 19.10 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 81900.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 60.60 | B | | P |
| 7439-92-1 | Lead | 2.00 | U | | F |
| 7439-95-4 | Magnesium | 19200.00 | | | P |
| 7439-96-5 | Manganese | 2.20 | B | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 4910.00 | B | | P |
| 7782-49-2 | Selenium | 2.00 | U | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 8010.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | W | F |
| 7440-62-2 | Vanadium | 15.40 | B | | P |
| 7440-66-6 | Zinc | 7.20 | B | | P |
| | Cyanide | 400.00 | U | | C |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA CLP 000036

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BO6PR5

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660802

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 18.70 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 83000.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 30.00 | U | | P |
| 7439-92-1 | Lead | 2.00 | U | | F |
| 7439-95-4 | Magnesium | 19500.00 | | | P |
| 7439-96-5 | Manganese | 2.00 | U | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 5240.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | B | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 8120.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | W | F |
| 7440-62-2 | Vanadium | 15.50 | B | | P |
| 7440-66-6 | Zinc | 12.50 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA CLP 000037

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PS3

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660804

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 62.70 | B | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 13.60 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 8080.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 71.40 | B | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 2480.00 | B | | P |
| 7439-96-5 | Manganese | 12.80 | B | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 8580.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | U | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 43500.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 5.00 | U | | P |
| 7440-66-6 | Zinc | 6.00 | U | | P |
| | Cyanide | 20.00 | U | | C |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP 000038

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PS4

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660805

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 13.90 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 8120.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 45.50 | B | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 2500.00 | B | | P |
| 7439-96-5 | Manganese | 11.50 | B | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 8790.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | U | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 43800.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 5.00 | U | | P |
| 7440-66-6 | Zinc | 6.70 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP 000039

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PS6

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660807

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 8.60 | B | | F |
| 7440-39-3 | Barium | 11.10 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 21600.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 30.00 | U | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 6990.00 | | | P |
| 7439-96-5 | Manganese | 2.00 | U | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 4890.00 | B | | P |
| 7782-49-2 | Selenium | 2.00 | U | | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 27400.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 26.70 | B | | P |
| 7440-66-6 | Zinc | 7.50 | B | | P |
| | Cyanide | 200.00 | U | | C |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP 0000040

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PS7

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660808

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 7.80 | B | | F |
| 7440-39-3 | Barium | 11.30 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 22100.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 30.00 | U | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 7160.00 | | | P |
| 7439-96-5 | Manganese | 2.00 | U | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 5080.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | U | | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 28000.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 28.40 | B | | P |
| 7440-66-6 | Zinc | 6.00 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BO6PS9

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660810

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 13.40 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 8150.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 65.20 | B | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 2490.00 | B | | P |
| 7439-96-5 | Manganese | 12.00 | B | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 8340.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | U | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 43800.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 5.00 | U | | P |
| 7440-66-6 | Zinc | 6.00 | U | | P |
| | Cyanide | 20.00 | U | | C |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP 0 0 0 0 4 2

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PT0

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP608

Matrix (soil/water): WATER Lab Sample ID: 920660811

Level (low/med): LOW Date Received: 6/10/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46.00 | U | | P |
| 7440-36-0 | Antimony | 36.00 | U | | P |
| 7440-38-2 | Arsenic | 2.00 | U | | F |
| 7440-39-3 | Barium | 13.00 | B | | P |
| 7440-41-7 | Beryllium | 1.00 | U | | P |
| 7440-43-9 | Cadmium | 4.00 | U | | P |
| 7440-70-2 | Calcium | 8100.00 | | | P |
| 7440-47-3 | Chromium | 7.00 | U | | P |
| 7440-48-4 | Cobalt | 7.00 | U | | P |
| 7440-50-8 | Copper | 7.00 | U | | P |
| 7439-89-6 | Iron | 38.10 | B | | P |
| 7439-92-1 | Lead | 2.00 | U | W | F |
| 7439-95-4 | Magnesium | 2470.00 | B | | P |
| 7439-96-5 | Manganese | 12.80 | B | | P |
| 7439-97-6 | Mercury | .10 | U | | CV |
| 7440-02-0 | Nickel | 18.00 | U | | P |
| 7440-09-7 | Potassium | 7670.00 | | | P |
| 7782-49-2 | Selenium | 2.00 | U | W | F |
| 7440-22-4 | Silver | 8.00 | U | | P |
| 7440-23-5 | Sodium | 43400.00 | | | P |
| 7440-28-0 | Thallium | 2.00 | U | | F |
| 7440-62-2 | Vanadium | 5.00 | U | | P |
| 7440-66-6 | Zinc | 8.00 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: